

BEST AVAILABLE COPY



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,465	01/22/2001	David L. Summers	14999.22.1	2143
22913	7590	12/06/2004		
WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER & SEELEY) 60 EAST SOUTH TEMPLE 1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111			EXAMINER CHANKONG, DOHM	
			ART UNIT	PAPER NUMBER
			2152	
DATE MAILED: 12/06/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/767,465

Applicant(s)

SUMMERS ET AL.

Examiner

Dohm Chankong

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1> Applicant's amendment and remarks have been received and reviewed. Claims 46-48 were added by Applicant. Claims 1-48 are now presented for examination.

Response to Arguments

2> Applicant's arguments filed 8.30.2004 have been fully considered but they are not persuasive. Examiner thanks Applicant for the detailed explanation of the merits of the present invention but believes that Applicant may have misunderstood the Examiner's rationale for the rejections.

Examiner will attempt to more clearly delineate his reasoning.

Applicant is arguing in substance (a) Examiner has failed to provide proper motivation for modifying Salo [in particular, modifying Salo's remote enterprise network to initiate the data tunnel to the data center], and (b) there is improper motivation to modify Salo to cache network data because Salo discloses the use of active server pages which eliminate the need to cache data.

A brief review of Examiner's argument is in order to clarify Examiner's position. Examiner stated in the previous Office Action that Salo discloses the limitations of claim 1 but did not specifically disclose the limitations of having the remote enterprise network initiate the data tunnel to the data center by transmitting a data request. Instead, Salo's invention disclosed having the data center initiate said data tunnel. Examiner stated that there was no difference between having the remote enterprise network or the data center initiating the data tunnel as the end result was the same - that is, a constant data tunnel was

Art Unit: 2152

established, the data tunnel operating as a virtual private network between the enterprise network and data center. As Applicant did not present any novelty or patentable distinction in regards to having the enterprise network initiate the tunnel, Examiner stated that it would have been well within ordinary skill in the art to have modified Salo's system to have the enterprise network initiate the data tunnel with the data center using a data request. That is to say, to have the remote enterprise network initiate the data tunnel is merely a design choice and does not provide any useful utility or patentability over Salo.

Furthermore, Salo goes on to suggest that objects within an enterprise network could indeed initiate the data tunnel with the data center [Figure 4 « items 190, 402, 415 » | Figure 6 | column 11 «line 63» to column 12 «line 10» | column 13 «lines 15-27» | column 14 «lines 65-67» where: Salo discloses that a DCOM stub located at his remote gateway server can initiate data tunnel with the DCOM proxy object located at the data center. Salo also discloses that the remote gateway server is generally located in the enterprise gateway server which, in turn, represents the enterprise network]. As a result of the aforementioned remarks, and because of the suggestion by Salo, Examiner believes there is proper motivation to modify Salo's remote enterprise network to send a data request (to initiate the data tunnel), and in response to said request, have the data center transmit reply data to the enterprise network (to establish the shared data tunnel).

So in response to (a), one of ordinary skill in the art at the time the invention was made would have been motivated to modify Salo's remote enterprise network with data tunnel initiation to provide the enterprise network functionality to access information from

Art Unit: 2152

the data center and to provide the functionality suggested by Salo of having the enterprise network capable of reinitiating the data tunnel if the original tunnel is dropped or lost.

In response to (b), Salo does disclose several embodiments of the data center. While application of the mentioned active server pages is represented in one embodiment, Salo also discloses another embodiment where the data center may act as a central repository for the subscriber's information [column 11 «lines 15-23»]. Therefore, with the need to store subscriber information at the data center, the use of a database-type structure and cache functionality is implicit in this embodiment of Salo and one of ordinary skill in the art would have reasonably motivated to modify the data center to include such functionality.

Claim Rejections - 35 USC § 103

3> The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4> Claims 1, 2, 9, 10, 13-16, 21-23, 26-34, 35, 37, 38 are rejected under 35 U.S.C 103(a) as being unpatentable over Salo et al (hereinafter Salo), U.S Patent No. 6,563,800.

5> As to claim 1, Salo teaches a method in a data center capable of communicating with a remote enterprise network, for enabling a user to access network data of the remote enterprise network through a data tunnel between the data center and the remote enterprise

Art Unit: 2152

network that operates as a virtual private network (abstract), the method comprising the acts of:

receiving a data request from the remote enterprise network (column 12, lines 35-38);

receiving an access request to access network data of the remote enterprise network from the user (column 6, lines 10-17);

transmitting the access request to the remote enterprise network using the data tunnel (column 6, lines 43-47);

receiving the network data from the remote enterprise network in response to the access request (column 6, lines 24-27); and

transmitting the network data to the user (column 6, lines 26-28).

Salo does teach transmitting ongoing reply data to the remote enterprise network, such that a data tunnel is established between the data center and the remote enterprise network, the data tunnel operating as a virtual private network (column 4, lines 2-4, column 6, lines 14-17 and column 18, lines 42-45) as well as having the remote enterprise network initiate a data tunnel to the data center (column 14, lines 65-67), he does not teach the aforementioned step in response to the data request from the remote enterprise network.

6> At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify Salo's enterprise network to initiate the connection and data tunnel with the data center, instead of having the data center initiate the connection and data tunnel with the enterprise network, as disclosed by Salo. Applicant has not disclosed that having the enterprise network initiate the connection and data tunnel provides an advantage, is used for

Art Unit: 2152

a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's claimed invention to perform equally well with having the data center initiating the connection to the enterprise network because the goal of establishing a connection between the data center and the enterprise network is accomplished equally as well as Applicant's claimed invention.

7> As to claim 2, Salo teaches a method wherein the data request is received by a designated server, and wherein the designated is one of multiple servers of the data center (column 9, lines 55-61).

8> As to claim 9, Salo teaches a method wherein the act of receiving an access request to access network data of the remote enterprise network from the user further comprises the act of authenticating the identity of the user (column 8, lines 46-50).

9> As to claim 10, Salo teaches a method wherein authenticating the identity of the user comprises the act of receiving a valid personal identification number (column 9, lines 12-18).

10> As to claim 13, Salo teaches a method, in an enterprise network capable of communicating with a remote data center network, for enabling a user to access network data of the enterprise network through a data tunnel between the remote data center and the enterprise network that operates as a virtual private network (abstract), the method comprising the acts of:

Art Unit: 2152

transmitting a data request to the remote data center (column 12, lines 35-38);

receiving, from the remote data center, an access request to access network data of the enterprise network, the access request having been received by the remote data center from the user and thereafter transmitted by the remote data center to the enterprise network through the data tunnel (column 6, lines 43-47 and column 11, lines 1-9); and

in response to the access request transmitting the network data to the remote data center such that the user is enabled to access the network data (column 12, lines 1-5).

Salo does teach receiving ongoing reply data from the remote data center, such that a data tunnel is established between the remote data center and the enterprise network, the data tunnel operating as a virtual private network (column 4, lines 2-4, column 6, lines 14-17 and column 13, lines 1-8), he does not teach the aforementioned step in response to the data request from the remote enterprise network.

11> At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify Salo's enterprise network to initiate the connection and data tunnel with the data center, instead of having the data center initiate the connection and data tunnel with the enterprise network, as disclosed by Salo. Applicant has not disclosed that having the enterprise network initiate the connection and data tunnel provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's claimed invention to perform equally well with having the data center initiating the connection to the enterprise network because the goal of

Art Unit: 2152

establishing a connection between the data center and the enterprise network is accomplished equally as well as Applicant's claimed invention.

12> As to claim 14, Salo teaches a method wherein the data request includes a uniform resource identifier (column 10, lines 48-57).

13> As to claim 15, Salo teaches a method wherein the data request is transmitted through a firewall (column 12, lines 56-61).

14> As to claim 16, Salo teaches a method wherein the data request is transmitted through a proxy server (column 12, lines 52-56).

15> As to claim 21, Salo teaches a method wherein upon receiving the access request, the method further comprises the act of:

performing an act upon the network data (column 6, lines 28-32).

16> As to claim 22, Salo teaches a method wherein performing an act upon the network data includes retrieving email message data (column 6, lines 20-28 and column 10, lines 35-39).

17> As to claim 23, Salo teaches a method in a data center capable of communicating with a remote enterprise network, for enabling a user to access network data of the remote enterprise network through a data tunnel between the data center and the remote enterprise

Art Unit: 2152

network that operates as a virtual private network (abstract, column 12, lines 35-43), the method comprising the acts of:

receiving an access request to access network data of the remote enterprise network from the user (column 6, lines 10-17);

as the ongoing reply data is being transmitted to the remote enterprise network, inserting the access request into the ongoing reply data and transmitting the access request to the remote enterprise network using the data tunnel (column 6, lines 14-20 and column 11, lines 4-7).

receiving the network data from the remote enterprise network in response to the access request (column 6, lines 24-27); and

transmitting the network data to the user (column 6, lines 27-28).

While Salo does teach transmitting the ongoing reply data to the remote enterprise network, such that a data tunnel is established between the data center and the remote enterprise network in response to an action of the remote enterprise network, the data tunnel operating as a virtual private network (column 4, lines 2-4, column 6, lines 14-17 and column 18, lines 42-45), he does not expressly teach:

receiving, from the remote enterprise network, a uniform resource identifier associated with a resource of a server of the data center; and

in response to receiving the uniform resource identifier, invoking the resource to generate ongoing reply data.

Art Unit: 2152

18> However, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify Salo's enterprise to initiate the connection and data tunnel with the data center by sending a uniform resource identifier associated with a resource, instead of having the data center initiate the connection and data tunnel with the enterprise network by sending a uniform resource identifier (column 10, lines 48-55 and column 11, lines 1-10), as disclosed by Salo. Applicant has not disclosed that having the enterprise network initiate the connection and data tunnel provides an advantage over having the data center initiate the connection, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's claimed invention to perform equally well with having the data center initiating the connection to the enterprise network by sending a uniform resource identifier to the network because the goal of establishing a connection between the data center and the enterprise network, and invoking a resource within the enterprise network to initiate the tunnel between the data center and the network is accomplished equally as well as Applicant's claimed invention.

19> As to claim 26, Salo teaches a method wherein the act of receiving an access request to access network data of the remote enterprise network from the user further comprises the act of authenticating the identity of the user (column 9, line 52).

20> As to claim 27, Salo teaches a method wherein authenticating the identity of the user comprises the act of receiving a valid personal identification number (column 9, lines 12-18).

Art Unit: 2152

21> Claim 28 is a claim to a computer program product and a computer-readable medium to perform the steps of the method of claim 1. Therefore, claim 28 is rejected for the reasons set forth in above paragraphs 7 and 8.

22> As to claim 29, Salo teaches a computer program product wherein the computer-executable instructions further comprise program code means for authenticating the identity of the user (column 9, line 12-20 and lines 40-46).

23> As to claim 30, Salo teaches a computer program product wherein the computer-executable instructions further comprise program code means for enabling telephony nodes of the data center to receive the access request and to transmit the access request to a designated server, wherein the designated server is transmitting the ongoing reply data to the remote enterprise network (Figure 1C, items 100, 110, 120, 122, 140 and 164 where the telephony node is item 120 since it receives data from wireless devices and item 164 is the dedicated server).

24> As to claim 31, Salo teaches a computer program product wherein the designated server is one of multiple servers of the data center, and wherein the user generates the access request using a telephone system (Figure 1C, item 164, column 9, lines 55-61 and column 6, lines 12-13).

Art Unit: 2152

25> As to claim 32, Salo teaches a computer program product wherein the computer-executable instructions further comprise program code means for caching a copy of network data in a database of the data center (column 11, lines 30-32).

26> As to claim 33, Salo teaches a computer program product wherein the computer-executable instructions further comprise program code means for transmitting the cached copy of the network data to the user in response to receiving the access request from the user (column 11, lines 35-47).

27> As to claim 34, Salo teaches a method, in an enterprise network capable of communicating with a remote data center network, for enabling a user to manipulate network data of the enterprise network through a data tunnel between the remote data center and the enterprise network that operates as a virtual private network (abstract), the method comprising the acts of:

transmitting a data request to the remote data center (column 12, lines 35-38);

receiving, from the remote data center, a user request for an act to be performed on network data of the enterprise network, the user request having been received by the remote data center from the user and thereafter transmitted by the remote data center to the enterprise network through the data tunnel (column 14, lines 22-31); and

upon receiving the user request, performing the act on network data of the enterprise network (column 10, lines 59-63).

Art Unit: 2152

Salo does teach receiving ongoing reply data from the remote data center, such that a data tunnel is established between the remote data center and the enterprise network, the data tunnel operating as a virtual private network (column 4, lines 2-4, column 6, lines 14-17 and column 13, lines 1-8), he does not teach the aforementioned step in response to the data request from the remote enterprise network.

28> At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify Salo's enterprise network to initiate the connection and data tunnel with the data center, instead of having the data center initiate the connection and data tunnel with the enterprise network, as disclosed by Salo. Applicant has not disclosed that having the enterprise network initiate the connection and data tunnel provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's claimed invention to perform equally well with having the data center initiating the connection to the enterprise network because the goal of establishing a connection between the data center and the enterprise network is accomplished equally as well as Applicant's claimed invention.

29> As to claim 35, Salo teaches a method wherein performing an act upon the network data includes deleting email (column 1, lines 35-36).

30> As to claim 37, Salo teaches a method wherein performing an act upon the network data includes retrieving a web page (column 7, lines 3-7).

Art Unit: 2152

31> As to claim 38, Salo teaches a method wherein performing an act upon the data includes retrieving email messages (column 14, lines 26-33).

32> Claims 3-7 are rejected under 35 U.S.C 103(a) as being unpatentable over Salo, in view of Wallach et al (hereinafter Wallach), U.S Patent No. 6,292,905.

33> As to claim 3, Salo does not teach a method wherein a database of the remote enterprise network is notified which of the multiple servers is the designated server, the designated server notifying the database when a data tunnel is established.

34> Wallach teaches a method wherein a database of the remote enterprise network is notified which of the multiple servers is the designated server, the designated server notifying the database when a data tunnel is established (column 8, lines 13-29 and claim 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Salo's method to store the identity of the primary server in a separate database after the server establishes a connection with the database in order to better implement load-sharing and facilitate fail-over amongst the multiple servers of Salo's method (Salo, column 8, lines 55-58). By keeping the identity of the primary server on the database, the switchover process to a different server when the primary server fails can be done completely transparently to the user.

Art Unit: 2152

35> As to claim 4, Salo teaches a method wherein the access request is received by a designated telephony node of the data center, and wherein the user generates the access request using a telephone system (column 6, lines 12-14 and column 8, lines 18-30 – the data center's interface network is considered the telephony node as it communicates and interacts with remote access devices which Salo discloses as PDAs, wireless phones and mobile computers).

36> As to claim 5, Salo teaches a method wherein the access request is received by one of multiple servers of the data center over the Internet, and wherein the access request is generated by the user using a device connected to the Internet (column 6, lines 10-17).

37> As to claim 6, Salo teaches a method wherein the designated telephony node of the data center transmits the access request to the designated server (Figure 1C, items 120 and 142 and column 8, lines 18-45).

38> As to claim 7, Salo teaches a method wherein the designated telephony node determines which of the multiple servers is the designated server by communicating with at least one of the multiple servers (column 9, lines 52-59).

39> Claim 8, 11, and 12 is rejected under 35 U.S.C 103(a) as being unpatentable over Salo and Wallach as applied to claims 3, 4 and 6 above, in further view of McLaughlin, U.S Patent No. 6,138,049.

40> As to claim 8, Salo does teach a method wherein the designated telephony node communicates with the database (column 8, lines 12-15 and column 12, lines 27-32 - where the telephony node is located in the data center and the database is stored in the enterprise network), but does not specifically teach a method wherein the designated telephony node determines which of the multiple servers is the designated server by communicating with the database.

41> McLaughlin teaches a method wherein the designated telephony node determines which of the multiple servers is the designated server by communicating with the database (column 2, lines 56-60, column 8, lines 7-36 and column 9, lines 9-15 - where the designated telephony node is the notification client, and communicates with the database through the notification manager and vice versa). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Salo so that the database communicated with the designated telephony node concerning the primary server so the system can immediately recover from a server failure without the need for a notification recovery request by the telephony node.

42> As to claim 11, Salo teaches a method wherein the act of transmitting the network data to the user includes the acts of:

transmitting the network data from the designated server to the designated telephony node (Figure 1C, items 120, 140, 142, 124 and 122 and column 8, lines 41-45); and

transmitting the network data from the designated telephony node to the telephone system used by the user (Figure 1C, items 120, 100, 122, 110, 104 and column 8, lines 8-11).

43> As to claim 12, Salo teaches a method wherein the act of transmitting the network data to the user includes the act of transmitting the network data from the designated server to the device that is connected to the internet (column 9, line 52 to column 10, line 4).

44> Claims 17 and 18 are rejected under 35 U.S.C 103(a) as being unpatentable over Salo, as applied to claim 13 above, in view of Subramaniam et al (hereinafter Sumbramaniam), U.S Patent No. 6,081,900.

45> Subramaniam was cited by Applicant in IDS #8 on 10/8/2002.

46> As to claim 17, Salo does not teach a method wherein the reply data is received through port 443.

47> Subramaniam teaches a method wherein the reply data is received through port 443 (column 7, lines 42-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Salo's method so reply data is received through port 443 by the enterprise network for the convenience of specifying a dedicated port.

Art Unit: 2152

48> As to claim 18, Salo does not teach a method wherein the reply data is received using Secure Sockets Layer protocol.

49> Subramaniam teaches a method wherein the reply data is received using Secure Sockets Layer protocol (column 7, lines 30-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include SSL protocol in the communication between the enterprise network and the remote data center to provide increased security for transferring data.

50> Claim 19 is rejected under 35 U.S.C 103(a) as being unpatentable over Salo, as applied to claim 13 above, in view of Roberts et al (hereinafter Roberts), U.S Patent No. 6,295,551.

51> As to claim 19, Salo does not teach a method wherein the reply data is received through port 80.

52> Roberts teaches it is well known in the art for port 80 to be used for the server to communicate over the web (column 10, lines 58-63, column 20, lines 1-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the ability for the enterprise network and its servers to connect to the data center for the reception and acceptance of data via a tunnel on port 80 because it would comply with standard used in HTTP communications and therefore insure proper communications with other servers on the internet.

Art Unit: 2152

53> Claim 20 is rejected under 35 U.S.C 103(a) as being unpatentable over Salo, as applied to claim 13 above, in view of Bendinelli et al (hereinafter Bendinelli), U.S Patent No. 6,631,416.

54> As to claim 20, Salo does not teach a method wherein the act of transmitting the network data to the remote data center includes the acts of:

- encrypting the network data to comply with Secure Sockets Layer protocol;
- transmitting the network data to the remote data center through a second data tunnel,

such that the transmission of the network data operates as a temporary virtual private network; and

- closing the second data tunnel.

55> Bendinelli teaches a method wherein the act of transmitting the network data to the remote data center includes the acts of:

- encrypting the network data to comply with Secure Sockets Layer protocol (column 25, lines 36-43);
- transmitting the network data to the remote data center through a second data tunnel,

such that the transmission of the network data operates as a temporary virtual private network (column 12, lines 15-33); and

- closing the second data tunnel (column 12, lines 20-24).

Art Unit: 2152

It would have been obvious to one skilled in the art at the time the invention was made to modify Salo to include the Secure Sockets Layer protocol as another security measure to prevent unauthorized intrusion; to transmit the data through a temporary tunnel operating as a temporary virtual private network for the purpose of short term data transfer so a long term connection does not need to be made and to close the tunnel when the data transfer is complete so bandwidth is not wasted.

56> Claim 24 is rejected under 35 U.S.C 103(a) as being unpatentable over Salo, as applied to claim 23 above, in view of Bendinelli.

57> Salo does not teach a method wherein the act of receiving the network data from the remote enterprise network comprises the act of receiving through a second data tunnel the network data from the remote enterprise network, the second data tunnel operating as a temporary virtual private network and is closed after the network data is received by the data center.

58> Bendinelli teaches a method wherein the act of receiving the network data from the remote enterprise network comprises the act of receiving through a second data tunnel the network data from the remote enterprise network, the second data tunnel operating as a temporary virtual private network and is closed after the network data is received by the data center (column 25, lines 36-43, column 12, lines 15-33, and column 12, lines 20-24). It would have been obvious to one skilled in the art at the time the invention was made to modify Salo

Art Unit: 2152

to include the Secure Sockets Layer protocol as another security measure to prevent unauthorized intrusion; to transmit the data through a temporary tunnel operating as a temporary virtual private network for the purpose of short term data transfer so a long term connection does not need to be made and to close the tunnel when the data transfer is complete so bandwidth is not wasted.

59> Claims 25 is rejected under 35 U.S.C 103(a) as being unpatentable over Salo, as applied to claim 23 above, in view of Subramaniam.

60> Salo does teach a method wherein the act of transmitting the access request to the remote enterprise network comprises the act of transmitting the access request using encryption, he does not expressly teach transmitting the access request using Secure Sockets Layer protocol.

61> Subramaniam teaches a method wherein the access request is transmitted using Secure Sockets Layer protocol (column 7, lines 30-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include SSL protocol in the communication between the enterprise network and the remote data center to provide increased security for transferring data.

62> Claim 36 is rejected under 35 U.S.C 103(a) as being unpatentable over Salo, as applied to claim 34 above, in view of Pandharipande, U.S Patent No. 6,529,500.

Art Unit: 2152

63> Salo does not teach a method wherein performing an act upon the network data includes faxing the network data to the user.

64> Pandharipande teaches a method wherein performing an act upon the network data includes faxing the network data to the user (column 2, lines 27-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Salo's network to allow users to receive faxed data which increases the number of ways that the user may receive the requested data.

65> Claims 39-45 are rejected under 35 U.S.C 103(a) as being unpatentable over Salo, in view of Shaheen et al, (hereinafter Shaheen), U.S Patent No. 6,032,227.

66> As to claim 39, Salo teaches a method in a data center capable of communicating with a remote enterprise network, for enabling a user to access network data of the remote enterprise network through a data tunnel between the data center and the remote enterprise network that operates as a virtual private network, the method comprising the acts of:

receiving network data from the remote enterprise network through a temporary data tunnel that is established between the data center and the remote enterprise network, the temporary data tunnel operating as a virtual private network (column 13, lines 1-6 and lines 15-16 and column 15, lines 1-8).

Art Unit: 2152

receiving an access request to access network data of the remote enterprise network from the user (column 6, lines 10-17);

retrieving the network data from the database in response to the access request (column 6, lines 43-46); and

transmitting the network data to the user (column 18, lines 11-14).

Salo does not teach caching a copy of the network data in a database of the data center.

67> Shaheen teaches a method of caching a copy of the network data in a database of the data center (column 3, lines 1-39 and column 5, lines 29-33). It would have been obvious one of ordinary skill in the art at the time the invention was made to modify Salo's data center with the ability to cache network data because mobile and wireless devices have a limited storage capacity and would be able to store information a central repository.

68> As to claim 40, Salo teaches a method wherein the network data of the enterprise network is disconnected from the enterprise network after the network data is received by the data center (column 11, lines 32-35 - where the enterprise network is combined into the data center. The network data is accessed during a session established with the web server (column 11, line 33). When the session ends, the network data is disconnected).

Art Unit: 2152

69> As to claim 41, Salo does not teach a method wherein the network data of the enterprise network is disconnected from the user after the network data is received by the data center.

70> Shaheen teaches a method wherein the network data of the enterprise network is disconnected from the user after the network data is received by the data center (column 2, lines 1-2 and column 5, lines 20-21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Salo's method to allow for his mobile devices to be disconnected from the enterprise network so they do not have to remain connected to the data center permanently.

71> As to claim 42, Salo teaches a method wherein the user determines what network data is transmitted to the data center (column 6, lines 37-43) but does not teach a method wherein the user determines what network data is cached in the database.

72> Shaheen teaches a method wherein the user determines what network data is cached in the database (column 1, lines 64-67 and column 7, lines 10-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include user selection of cached data in Salo so the user can control what is stored at the data center and can decide what he wants to access at a later time if he disconnects from the network and can't store more data on his mobile device.

Art Unit: 2152

73> As to claim 43, Salo teaches a method wherein the act of receiving an access request to access network data of the remote enterprise network from the user further comprises the act of authenticating the identity of the user (column 9, line 12-20 and lines 40-46).

74> As to claim 44, Salo does not teach a method wherein the access request comprises a command to update network data.

75> Shaheen teaches a method wherein the access request comprises a command to update network data (column 1, lines 47-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include update functionality in Salo's data center so files can be kept current and any changes to the data can be stored.

76> As to claim 45, Salo does not teach a method further comprising the acts of updating the cached copy of network data, and transmitting update information to the enterprise network.

77> Shaheen teaches a method further comprising the acts of updating the cached copy of network data, and transmitting update information to the enterprise network (column 3, lines 39-42 – where the server is the enterprise network). It would have been obvious one of ordinary skill in the art at the time the invention was made to include the update and synchronization functionality of Shaheen in Salo so that data that is updated locally can be stored and synched with the enterprise network.

78> As to claim 46, Salo discloses having the remote enterprise network initiate a data tunnel to the data center, the data tunnel operating as a virtual private network [Figure 6, column 14 «lines 65-67»] but does not specifically disclose receiving a data request from the remote enterprise network or transmitting ongoing reply data to the remote enterprise network.

79> However, as Salo suggests the remote enterprise network initiating the establishment of the data tunnel to the data center, one of ordinary skill in the art would have reasonably inferred that the remote enterprise network would need to transmit some sort of request to the data center to establish the tunnel. Consequently, it would have been reasonable to also infer that the data center would transmit a response to the enterprise network to commit to the tunnel. Such tunnel functionality is well known in the art and one of ordinary skill in the art would have been motivated to perform such a modification to follow Salo's suggestion.

80> As to claim 47, Salo discloses updating network data [column 15 «lines 51-55»] but does not specifically disclose a command that performs the update.

81> Shaheen teaches a method wherein the access request comprises a command to update network data (column 1, lines 47-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include update functionality in Salo's data center so files can be kept current and any changes to the data can be stored.

Art Unit: 2152

82> As to claim 48, Salo does teach cached network data [column 11 «lines 15-23»] but does not specifically teach a method further comprising the acts of updating the cached copy of network data, and transmitting update information to the enterprise network.

83> Shaheen teaches a method further comprising the acts of updating the cached copy of network data, and transmitting update information to the enterprise network (column 3, lines 39-42 – where the server is the enterprise network). It would have been obvious one of ordinary skill in the art at the time the invention was made to include the update and synchronization functionality of Shaheen in Salo so that data that is updated locally can be stored and synched with the enterprise network.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

Art Unit: 2152


advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is (571)272-3946. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DC


ZARNI MAUNG
PRIMARY EXAMINER

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.